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FYI.

<https://www.wisconsinrapidstribune.com/story/news/2018/07/18/few-solutions-given-high-nitrate-levels-armenia-port-edwards/795119002/>

Few solutions given for high nitrate levels in Armenia, Port Edwards water

Karen Madden, Wisconsin Rapids Daily Tribune Published 1:31 p.m. CT July 18, 2018 | Updated 3:35 p.m. CT July 18, 2018



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(Photo: Karen Madden/USA TODAY NETWORK-Wisconsin)

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NECEDAH - Residents of two central Wisconsin counties hoping to find clear solutions to their contaminated well water received no such news Tuesday from a panel of health specialists.

Health officials from local, state and federal agencies know the area of northern Juneau County and southern Wood County has an alarmingly high number of wells with an alarmingly high amount of nitrates in them.

They know people should not drink the water, especially pregnant women and babies.

But, although the experts know nitrates generally are caused either by fertilizer or animal or human waste, they say it's difficult to determine exactly where the contamination is coming from and, even if homeowners can prove the source is agricultural, it's legally difficult to make farms pay for the high costs of getting clean water.

Panelists presented their findings and ideas for residents at a public forum Tuesday night attended by more than 100 people at the Necedah Town Hall in Juneau County. One option is digging a new, deeper well, but that can cost more than \$7,000. A second is buying bottled water, which can cost a family hundreds of dollars a year. The third was treating the water. That costs \$800 up front plus \$100 a year afterward.

And deeper wells and treatment still might not get the most contaminated water below the 10 milligrams of nitrates per liter that is considered safe. One couple who attended the forum, who declined to give their name for this story, told a USA TODAY NETWORK-Wisconsin reporter they dug a deeper well and their water still tested at 31 milligrams per liter in nitrates.

The issue gained extra attention in early 2018, when homeowners in the northern Juneau County town of Armenia and southern Wood County town of Port Edwards expressed concern about the safety of their drinking water, said Nancy Eggleston, Wood County environmental health officer.

On May 30, seven two-person teams of county employees went to 104 homes — 86 in Juneau County and 14 in Wood County — to get water samples for testing.

The test results showed 42 percent of the samples had more than 10 milligrams per liter of nitrates, said Kevin Masarik, groundwater education specialist at the University of Wisconsin-Stevens Point. Nitrate levels of 10 milligrams are the maximum scientists consider safe for drinking. About 24 percent of the wells had more than 20 milligrams per liter.

Too much nitrate consumption in people can cause a variety of health effects, said Robert Thiboldeaux, a toxicologist with the Wisconsin Department of Health Services. The nitrates affect the oxygen carried in the blood supply, causing what is known as blue baby syndrome. Infants, women who are pregnant or might become pregnant should stop drinking the water immediately.

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In healthy adults, long-term consumption of nitrates can cause thyroid problems and cancer.

"If nitrate levels are high, take action," Thiboldeaux said.

But action can be expensive and have questionable results.

The Wisconsin Department of Natural Resources suggests that residents with water that has nitrate levels above the recommended amount drill a new well, said Marty Nessman, DNR Private Drinking Water Program manager. Most wells in the area are 15 to 30 feet below the top of the water table. Nessman suggested residents drill wells that are at least

60 feet into the water table. For most areas in Armenia and Port Edwards, it would mean wells with a total depth of between 80 and 100 feet.

Nessman said the DNR cannot guarantee the deeper wells won't have nitrate issues or that the wells won't become contaminated with nitrates. A new well would cost more than \$7,200, Masarik said in his [presentation Tuesday evening](#).

The DNR cannot order residents to drill deeper wells, Nessman said. The agency only recommends it.



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Armenia and Port Edwards residents gather to listen to information about high nitrate levels in their water Tuesday evening at the Necedah Town Hall. (Photo: Karen Madden/USA TODAY NETWORK-Wisconsin)

Another option is for residents to treat their water. The treatments are usually done on drinking water taps and cost about \$800 to install and \$100 a year to operate. The treatments likely would not get nitrates to a safe level in water that's already higher than 27 parts per milliliter, said Masarik, the UW-Stevens Point specialist.

The final option is to buy bottled water, which would cost about \$190 a person per year, Masarik said.

The nitrates in the water come from pesticides, human waste or animal waste, Masarik said. People need to use caution not to jump to conclusions about the source of high nitrates, he said.

Mararik showed residents a map with land use in Juneau and Wood counties. Most of the land in the area of the contaminated wells is used for agriculture.

Farmers can do everything right and according to standards and still cause nitrate contamination, said Mararik, who told the crowd that local farms generally apply a safe level of pesticides on their crops. Even if officials can find the source of contamination, current Wisconsin laws protect farmers and would make it difficult for affected homeowners to get compensation, he said.

"This is a challenging problem," Masarik said. "It's possible that even with current recommendations for how to manage our landscape, it might not be good enough."

Separate from the well testing by Wood and Juneau counties, the U.S. Environmental Protection Agency completed tests in early May, said Dean Maraldo from the Chicago EPA office. The EPA received complaints from people in the northern Juneau and southern Wood County areas about water, and they blamed various potential sources including concentrated animal feeding operations and cranberry crops, he said.

The EPA created a grid of 41 test sites and took bore samples with a tube that is pushed into the ground. The raw data currently is available to the public online, but EPA staff members are still analyzing the data and expect to produce a report by the end of August — an analysis that should help to identify potential sources of the contamination, Maraldo said.

"We're working very closely with the DNR to determine the next steps," he said.

The counties intend to complete another round of sampling in the fall, Eggleston said. People in the affected areas interested in having their water tested can call the Wood County Health Department at 715-421-8911 or Juneau County Health Department at 608-847-9373.

<http://www.wsaw.com/content/news/Preview-7-Investigates-Some-Wood-County-homeowners-unable-to-drink-well-water-488386491.html>

7 Investigates: Some Wood County homeowners unable to drink well water





By [Emily Davies](#) |

Posted: Tue 8:43 AM, Jul 17, 2018 |

Updated: Tue 11:18 PM, Jul 17, 2018

WOOD COUNTY, Wis. (WSAW) -- Dozens of people in Wood and Juneau counties are left in limbo -- told they can no longer drink their well water with no solutions in sight. The well water survey done this spring found nearly half of the homes tested, had dangerously high nitrate levels.

The Lochners are just one example. "We don't cook with it, we don't brush teeth with it, we don't drink with it, dogs don't drink it," Mark and Robyn Lochner said. "It's the only thing we do is shower and bathe with it."

While the water looks clear at the Lochner's home in Nekoosa, the tap from their private well is flowing with nitrates.

"Whenever we go to other people's houses and you can drink the water from the tap it's like, 'oh wow, this is kind of nice, wish we could do that!'" Robyn Lochner said.

Elevated levels of nitrates usually come from pesticides, herbicides or fertilizer.

Wisconsin's undrinkable limit is 10 milligrams per liter of nitrate. Homes in Port Edwards, Nekoosa, and Armenia had levels three to five times beyond that.

“It used to be just blue baby syndrome is what we were concerned with, but now we realize there's a lot more to nitrates than we ever dreamed. There's a lot more studies going on and coming up with a lot of links to other potential diseases such as diabetes, thyroid disease, certain cancers,” Wood County Environmental Health Supervisor Nancy Eggleston explained.

To get more information, residents packed the Necedah Town Hall Tuesday night.

A lot of data, so far, shows agriculture is likely the source of the problem, but scientists researching these wells say more tests need to be done to determine a definite source.

"This is a challenging problem and it's possible that even with The current recommendations with how to manage our landscapes, that it might not be good enough to protect everybody's water quality. I'm not saying that's right, I'm saying the tools that we have in place, I think often times the agency folks are probably at their limit in terms of what they're able to do from encouraging wiser-land use management," said Kevin Masarik with the University of Wisconsin Stevens Point.

This means, even if specific farms are named as a source, there may not be much that can legally be done to hold them accountable.

This makes it difficult for homeowners like the Lochners who have been protesting a large farm owned by the Wysocki families. Golden Sands Dairy is still hoping to build a 5,300 cow dairy operation in Southern Wood County. Last month, the Wisconsin Supreme Court ruled that the family had the permits to go ahead.

Even with the supreme court's approval, residents say they're still concerned for what the potential farm expansion means for their drinking water.

The next step in the process is more testing. EPA testing results came in Tuesday, but the interpretation of what those results mean likely won't be available until early August.

NewsChannel 7 reached out to the Wysocki Family of Companies but didn't hear back.